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ABSTRACT

The texts of three conference papers are presented in this volume. The papers are: Student-Oriented Management: A Proposal for Change (Alexander W. Astin); Goals, Outcomes, and Academic Evaluation (Howard R. Bowen); and A Summary of the 1978 COPA Summer Conference (Charles M. Chambers). The first addresses the definition of quality in administration, and concludes that a high quality institution is one whose management system keeps track of the intellectual and personal development of its students. In the second paper, seven basic principles are suggested for use in the identification and evaluation of outcomes in a particular college or university's undergraduate education. The third paper outlines and discusses several themes emerging during the conference: assumptions about outcomes, quantitative measurement of education, evaluation by outcomes, the use of self-study and team review, the use of accreditation, and the validity of outcomes assessments. (MSE)

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An occasional paper

EVALUATING EDUCATIONAL QUALITY:

A CONFERENCE SUMMARY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Alexander W. Astin
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FOREWORD

The Council on Postsecondary Accreditation sponsored a Summer Conference on Accreditation at the Kellogg West Center for Continuing Education at California State Polytechnic University, Pomona, California, on August 2, 3, and 4, 1978. The conference theme was "Evaluating Educational Quality"; and about 150 accrediting professionals, commission members, and others joined in the three-day discussion of this important and timely topic.

It quickly became apparent that there was strong agreement among the conference participants that, in evaluating educational quality, accrediting bodies increasingly must focus on "educational outcomes"—the product of education more than the process of the setting. This emphasis on educational outcomes was shared in the major papers presented at the conference. They were:

- ☐ A keynote address by Alexander W. Astin, Professor of Higher Education, University of California, Los Angeles, and President, Higher Education Research Institute;
- ☐ A discussion paper by Howard R. Bowen, Avery Professor of Economics and Education, Claremont Graduate School; and
- ☐ A conference synthesis by Charles M. Chambers, Staff Associate and Legal Advisor at COPA.

These three papers so cogently and effectively address the topic of evaluating educational quality through an educational outcomes approach that we are responding to the many requests that we produce them in printed form. We hope that you share our belief that this publication makes a valuable contribution to a growing literature on this significant topic.

Kenneth E. Young
President
The Council on Postsecondary Accreditation

STUDENT-ORIENTED MANAGEMENT: A PROPOSAL FOR CHANGE

Alexander W. Astin

Two major studies that I have been involved in over the past several years have convinced me that our traditional notions about institutional "quality" are in need of fundamental revision.

These areas of research are student development and college administration. The substantial literature in these two areas shows very little overlap between the two. Studies on student development are carried out by a quite different group of researchers and read by a very different audience than studies on college management and administration. This gap probably is no accident; rather, it reflects something very fundamental about our institutions and about how they are perceived and operated. More important, the failure to appreciate the significance of this gap and to develop ways of bridging it represents a major obstacle to the improvement of institutions, whether by accrediting or any other means.

My research convinces me that it is indeed possible to bridge the gap, but it will take considerable courage on the part of college administrators to take the first step.

College Administration and Management

Although most college catalogues claim that student development is a fundamental institutional purpose, the decision-making process in higher education typically ignores the student implications of alternative courses of action. This tendency is exemplified by the computer-based management information systems now used by many colleges and universities. Except for simplistic information on enrollments and majors, these systems provide almost no information on students. Administrators who rely on such systems are thus encouraged to view planning and decision-making basically as a problem in resource manipulation. The "benefit" side of the decision equation, as it reflects the probable consequences for student development, receives scant attention at best and in most cases is ignored altogether in the decision process.

To the naive student development researcher, this problem has an obvious solution: "Let's scrap these resource-oriented management

systems and develop instead systems that are primarily student-oriented." However, administrators who might be sympathetic to a more student-oriented approach are unlikely to support and pursue such a system simply because they believe it is unfeasible. I believe, on the other hand, that such a system not only is feasible but provides an opportunity to improve substantially the quality of our planning and decision-making.

Assumptions for the System

The major assumptions upon which the approach would have to be based include:

☐ Assumption that the principal function of educational administration in general, and of planning and decision-making in particular, is to *enhance student development.* While the other major functions of higher education—research and public service—have considerable status in many institutions, administrators cannot hope to enhance the institution's *educational* mission if they ignore the student implications of their decisions.

☐ Assumption that the acquisition of resources—whether money, capital improvements, or additional staff—is regarded, at best, as an intermediate consequence of decisions; the ultimate consideration is how such resources can be utilized in the educational process to impact favorably on students. In other words, the acquisition of resources is not an end in itself.

☐ Assumption that student "development" is a multidimensional phenomenon involving cognitive skills, socialization, and career preparation. Developmental goals may be short-term (e.g., learning calculus or child psychology) or long-term (e.g., becoming a productive scientist or an effective parent). Although these different aspects of student development may be valued differently by students, parents, institutions, and the general public, the "quality" of an institution and the "effectiveness" of administration should be assessed in terms of the institution's contributions to these developmental goals.

Theories About Administration and Learning

One of the most important outcomes of our institute's[1] studies of administration and of student development is that they have enabled us to develop some theories about how administrators operate and how students learn and develop. No aspect of the higher education enterprise—whether it be administration, accrediting, or assessing institutional quality—makes much sense unless it is based on some conception (theory or simply a point of view) about how administrators operate and how students develop.

1. Higher Education Research Institute.

Most writings that deal with the theory and practice of college administration say very little about *learning* or *education;* some indicate that profit rather than education is the bottom line. Administration is more understandable when viewed as an art form rather than a science that can be taught didactically or learned by reading a "how to." A manual on "how to administer a college" is largely a waste of time in teaching people to be effective administrators.

An analogy to the fine and performing arts is instructive. In these fields, an essential ingredient in the development of performing techniques or skills is feedback, or what the learning psychologists call "knowledge of results." Neophyte painters see what comes out on the canvas and adjust their behavior accordingly; musicians hear what they play or sing; dancers use mirrors to enhance their feedback.

Administrators in other fields generally have feedback to gauge the effectiveness of their efforts—access to information on sales volume, profits and losses, etc.—to guide their planning and decision-making. The educational administrator, by contrast, ordinarily receives little feedback on student learning and development to guide decisions. While college administrators typically have access to fiscal data, they have little information concerning the educational condition of the institution; they lack regular feedback on the educational development and progress of their students.

The same "need for feedback" argument could be made for college faculty. Faculty are somewhat closer to appropriate feedback in their classroom teaching and advising experiences, but even there the feedback is often misleading, coming mostly from the more aggressive students. Further, such feedback may not tell the professor much about what students are actually learning. Relying on final examination results is not appropriate feedback about learning. As for advising, professors rarely have an opportunity to learn about their successes and failures in this potentially important enterprise. In my own contacts with students, I seldom have a sense of what is really going on except among those few students with whom I work closely in a kind of apprenticeship relationship.

The "performing art" analogy also can be extended to support staff. Many areas of institutional functioning impact directly on students: registration, orientation, financial aid, housing, food services, parking, social activities, career counseling, personal counseling, extracurricular activities, health services, and job placement. How can the personnel responsible for these diverse student services improve their programs and policies without systematic feedback concerning the impact of their efforts on the students they serve?

Learning and Developing

If a viable theory about student development could be formulated, it should presumably enable administrators to choose among alternatives for solutions with a little more intelligence and a little

more consistency. My own theory of student development grew out of two major studies of institutional impact on student development.[2] A key concept in the theory is "student involvement." The theory states that *the more the student is involved in the academic experience, the greater the learning and growth. The less the involvement, the less the learning and the greater the chance that the student will be dissatisfied and drop out.* Involvement is not an esoteric or mysterious construct. It is manifest in how much physical and psychological energy the student devotes to the academic experience. In certain respects, involvement very much resembles a Freudian concept called "cathexis." Freud had the idea that people invest psychological energy in things or people outside of themselves, i.e., persons can "cathect" on their friends, families, jobs, and so on.

The students' degree of cathexis or involvement in the academic experience can be manifest in a variety of ways: the amount of time they spend studying, how much they interact with each other, or with professors, and the amount of time they spend on campus. There are, of course, other ways for estimating how students are involved in what is going on in the institution.

Our longitudinal research shows that virtually every institutional policy or practice that increases involvement also enhances student development. We found that, contrary to folklore, having the part-time job on campus actually helps the student to stay in college. (When a student works more than 20 hours, however, the effect disappears, and full-time work reverses the trend.)

A second and perhaps the most important phenomenon that enhances student learning and development is the residential experience. We found also that being a member of a social fraternity or sorority enhances persistence. Participation in moderation in almost any kind of extracurricular activity seems to help: honors programs, ROTC, undergraduate research projects, frequent interaction with faculty and with student peers, studying hard, athletics.

Getting Students Involved

Research results therefore suggest that, as a general operating principle, the administration and faculty should formulate plans and policies designed to encourage students to *get more involved*, to invest more of their time and their physical and psychic energy in the educational process.

The student-oriented management information system would operate on a fairly simple feedback principle: *Student progress would be monitored through an information system that regularly yields data on any aspect of personal development that relates to the institution's educational goals.* Subsequent decisions about institutional

2. See A. W. Astin, *Preventing Students from Dropping Out* (San Francisco: Jossey-Bass, 1976), and Astin, *Four Critical Years* (San Francisco: Jossey-Bass, 1977).

policy and practice, including resource allocation decisions, would be designed to bring about greater correspondence between student development and stated developmental goals. The system itself would be continuously subject to change through one or more of the following mechanisms:

☐ Redefinition of institutional objectives (addition of new objectives, sharpening definitions, and so on).

☐ Modifications in the method to assess particular developmental outcomes.

☐ Alterations in the method of analysis or dissemination of information.

Design for Decision-Making

Like any management information system, the student-oriented system should be designed primarily for use in decision-making. The need to render an educational decision implies the existence of two fundamental conditions: (1) some desired outcomes or *ends*, and (2) two or more alternative *means* to achieve those ends. The ends, of course, concern student development. Alternative means might include organizing certain learning experiences (e.g., curricula, instructional methods), structuring the physical environment in the design and location of classrooms, buildings, open space, or establishing certain rules or regulations. *Every administrative decision should be predicated on a belief in the existence of a causal relationship between some educational outcome and a particular means selected to achieve that outcome.* The good administrator should believe that of all the means available, the one selected is "best" in that it is most likely to produce the desired outcome.

Traditionally, college faculty and administrators have been more means- and ends-oriented. The reward structure in higher education clearly reinforces this tendency, since administrators are rewarded not for maximizing the development of the student, but for acquiring a large share of higher education's limited resources: money, bright students, and highly trained and prestigious faculty. The accreditation process reinforces this means-orientation, because it seldom asks hard questions about ends. It is refreshing to see the accrediting bodies now placing more emphasis on having institutions and programs evaluate outcomes or ends.

Another reason for the means-orientation of most administrators is that the causal connections between means and ends are not well understood. Consequently, administrators must operate with a largely untested folklore about what works and what doesn't work. Thus, one major benefit of the student-oriented system is that it would help administrators develop a better understanding of how their actions are likely to affect students. If nothing else, it would encourage them to think more in terms of ends than of means.

Ultimately, the system should be able to tell them if a particular program or policy actually worked!

Student Time as a Resource

Administrators concentrating on resource acquisition often fail to recognize that their greatest potential resource may be student *time*. The theory of involvement suggests that the extent to which students are able to achieve particular developmental outcomes is a direct function of the amount of time and effort they devote to activities designed to produce these outcomes. For example, if improving knowledge of history is regarded as an important outcome for history majors, the maximization of this outcome may well be a direct function of the time the students spend listening to professors talk about history, reading historical works, and discussing history with other students. Within certain broad limits, the more time spent in such activities, the greater the learning. The time spent attending formal lectures and taking notes and otherwise attempting to comprehend the material represents a fraction of the potential time and effort that might be devoted to activities that could contribute to historical knowledge and skills. The more obvious methods for controlling this time and effort would be to assign out-of-class work, to improve the quality or accessibility of library offerings in history, and to make lectures and other course materials available through audio and video tapes, slides, and other media. There is an important distinction, however, between *making such resources available* and the student's *effective use* of them. An institution may have an excellent library collection and a wealth of associated media that students seldom use. Professors may assign homework that students fail to complete. Classes may be poorly attended, or students may attend and fail to profit significantly because they are bored or distracted.

In short, an effectively managed institution not only provides appropriate learning resources but also creates the environmental conditions that encourage students to make effective use of those learning resources.

Most administrators do not recognize that virtually every institutional policy and practice can affect how students spend their time and how much effort they devote in academic versus nonacademic pursuits. These "administrative" issues include class schedules, policies on class attendance, regulations on academic probation and participation in honors courses, policies about office hours for faculty, and student orientation. Moreover, administrative decisions on many "non-academic" issues can significantly affect the way students spend their time in academic pursuits: location of new buildings, such as dormitories and student unions; rules governing residency; design of recreational and living facilities; on-campus employment opportunities; number and type of extracurricular activities and regulations governing participation; frequency, type, and cost of cultural events;

roommate assignments; financial aid policies; relative attractiveness of eating facilities on and off campus; and parking regulations.

Measuring Student Development

The success of any student-based management information system (MIS) depends heavily on the relevance of student outcome data to institutional objectives. While any given institution needs to develop its own specific outcome measures, at least three types of measures are relevant to the educational objectives of most institutions. These "core" measures should be included in any student-based management information system:

☐ *Successful completion of a program of study.* In its simplest form, this measure would involve a dichotomy; the student either completes a degree plan or drops out. More sophisticated approaches to such a measure would be to determine if the students' undergraduate achievements are consistent with their original plans at entry. For example, if a student entered college to become a lawyer, simple completion of the undergraduate degree may not be sufficient, given the relatively stringent admissions requirements of law school. Thus, it might be more appropriate to use admission to law school as a criterion of "successful completion." Different students, in other words, may require different "success" criteria.

☐ *Cognitive development.* Virtually all colleges and universities are concerned with students' cognitive development. Most instituitons, however, limit their assessment to the traditional grade-point average. Since grades reflect only students' relative level of performance at a particular point in time, they may not indicate accurately what the student has learned. Cognitive development probably requires some form of repeated measurement, where change can be assessed by comparing the student performance level at two or more points in time. Research on learning, however, suggests that study time may be a good surrogate measure for how much the student is learning.

☐ *Student satisfaction.* In one sense, the students' level of satisfaction with the institution's program is one of the most important indications of program effectiveness. Satisfaction can be measured in an overall sense, but it would probably be useful to obtain information on the students' degree of satisfaction with more specific matters, such as the quality of teaching, advising, curriculum, facilities, extracurricular activities, and student services.

Designing the Data Base

The basic types of student data include entry, process, and outcome. Entry data refer to characteristics of students when they first enroll, process data to what happens to the students while enrolled, and outcome data to the students' degree of attainment of desired educational or behavioral objectives.

The basic function of process information (which encompasses much of the potential data that can be collected on students) is to reflect what is happening to students. The distinction between process and outcome information is often fuzzy. For example, the fact that a student switches majors can be treated as a change in process, since the student is now exposed to a different field of study, or as an outcome, since the student usually does the choosing. The distinction between process and outcome in this case is not intrinsic to the data; rather, it depends on how the data are used. Thus, if one is interested in how the student's major field affects some other outcomes (e.g., the number of hours spent studying) the change in major can be regarded as a change in process. If one is interested in how the student's choice of a major is affected by some other process variable, then the change in field is treated as an outcome variable.

Student Satisfaction

Student satisfaction is a useful category because it is relatively easy to assess and is widely applicable to the college experience. Students can evaluate not only their academic programs and instruction, but also institutional services: such as orientation; registration, financial aid, academic advisement, career counseling, personal counseling, health services, job placement, and campus housing. Even residential facilities can be rated on privacy, roommate assignment, quietness, food service, bathroom facilities, and programming (lectures, films). Students can evaluate extracurricular activities, opportunities for independent study, social life, work experience, and contact with faculty members and student peers. While any institution must decide for itself which areas of satisfaction are most critical, student satisfaction represents a potentially rich source of outcome data for the MIS.

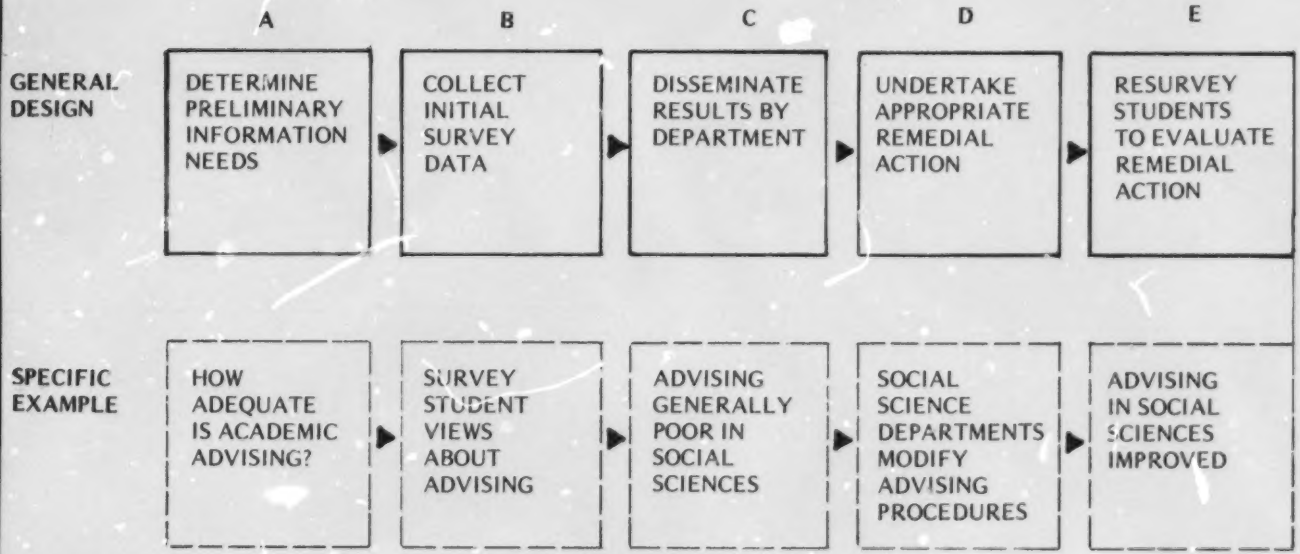
Critical Issues in Implementation

The top row of boxes in Figure 1 shows the five major steps involved in implementing a student-oriented management information system. The second row of boxes (broken lines) illustrates each general step with a specific example. In the first step (A), it is necessary to determine what items of information are most needed in the preliminary system. For example, a modest beginning might include a simple student survey that includes a time diary together with ratings of various aspects of the institutional experience (of which the quality of academic advising would be just one). Ideally, all segments of the academic community would participate in designing the instrument, although it would be important to keep the survey short and simple in this early stage.

The second step (B) involves the actual data collection, which would presumably be planned to occur at regular intervals (say, semi-annually). Two important considerations here are the sampling procedures and the method of data collection. Since one should be

Figure 1

Basic Steps in Implementing a Student-Based Management Information System



able to create separate reports of results at the departmental or school level, sampling should insure that each relevant organizational sub-unit is represented by adequate numbers of students. In large institutions, samples of respondents could be rotated so that the same student would not be surveyed more than once a year. In smaller colleges, it might be necessary to sample the same students more than once a year, particularly if separate breakdowns of results by class (i.e., freshman, sophomore), sex, or other sub-groupings are desired. The possible survey methods are many—mail, personal interviews, etc.—but perhaps the surest method is periodically to take a small amount of class time to administer the survey.

Disseminating Survey Results

Dissemination of survey results (Step C) is a critical step in the implementation process. I have already stressed the importance of providing separate tabulations for each unit or school in addition to institution-wide "norms" based on all respondents. Such norms provide a basis for each sub-unit to evaluate its own data. Ideally one would have access to comparative normative data from other institutions.

Although such inter-institutional consortium arrangements may be difficult and time-consuming to implement, the resulting comparative norms can be very useful in providing a broader perspective from which to view any given institution's data. If several institutions are seriously considering a cooperative venture of this sort, it would not be necessary to use identical survey instruments (such a requirement might ultimately provide an insurmountable obstacle to implementation). Perhaps the most realistic expectation is that some of the survey items would be common to all institutions.

Administrative Climate

Another consideration in dissemination is the administrative climate in which the results are to be reported. If the administration sees its role as primarily educational—to help academic departments and administrative service units (financial aid, etc.) learn more about how they affect students—then the results are more likely to be viewed in a constructive and facilitative way. On the other hand, if the administration intends to use the results as a basis for rewarding good performance and punishing poor performance, then the entire survey activity is likely to be viewed with hostility and suspicion. Moreover, such an evaluative attitude will encouarge practitioners to manipulate the results. On a purely intuitive basis, I would predict that the survey's positive impact on educational practice will be greatest when the professors and administrators being rated believe that the results will not be used to deprive them of resources or rewards.

It is difficult for a practicing professional to face up to his or her limitations and to develop the courage to change established habits.

If institutions really want to provide a more meaningful and productive educational experience for students, however, change must occur at the level of the individual teacher or administrator. These practitioners need to be convinced that they can be open to honest evaluation and criticism without fear of retaliation or rejection. Moreover, they need to believe that the administrative environment supports their attempts at self-evaluation and that constructive change is not only possible but actively supported by the administration. While such an atmosphere of openness clearly cannot be created overnight, the administration should strive to promote a positive and nonpunitive view of the student-based system from the very beginning.

Interpretation and Change

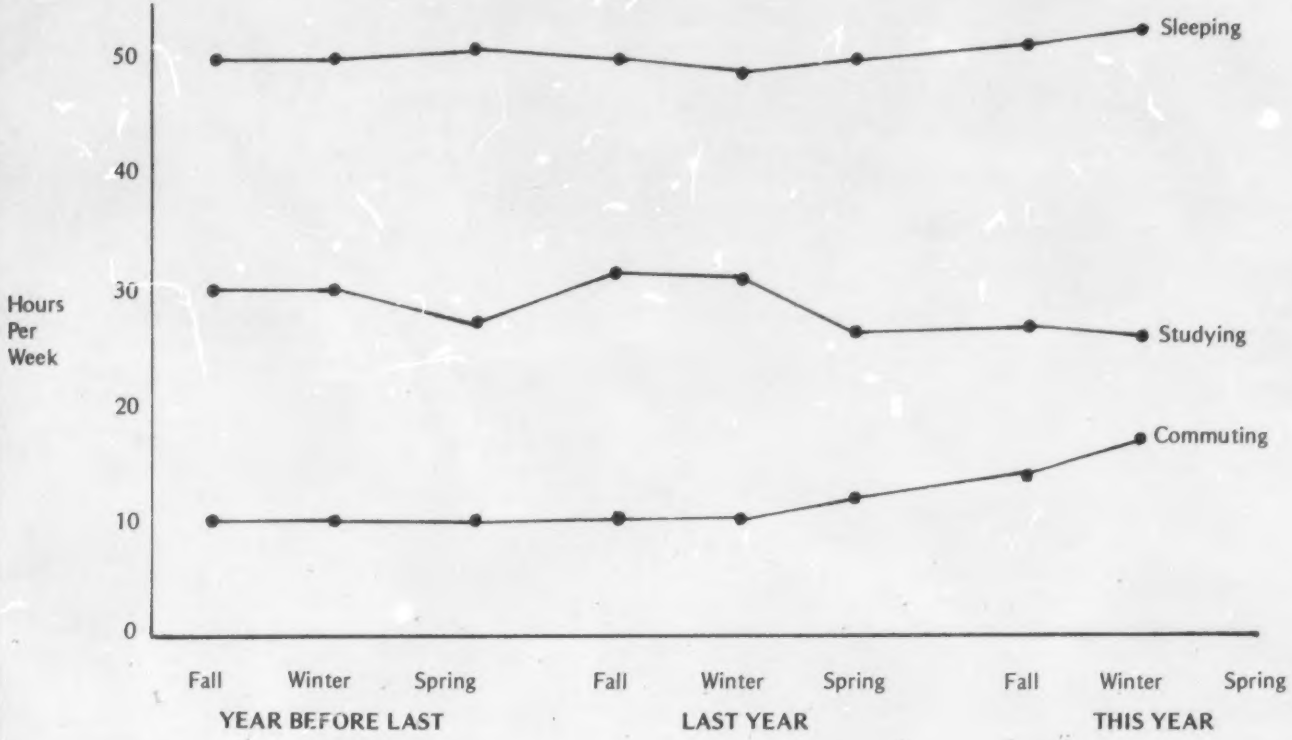
The fourth implementation step (D) is the most difficult and complex one. It involves the interpretation of survey results and, where appropriate, the initiation of appropriate changes in policy or practice. In the hypothetical example shown in Figure 1, students in the social sciences have rated as "poor" the quality of academic advising. Ideally one would hope that the social science departments would note this result, see it as a real problem, and undertake appropriate remedial actions. It is possible, of course, that the relatively poor rating of advising in these fields would be interpreted by social science professors in other ways: the rating question is phrased in such a way as to prejudice the ratings by social science majors; social science majors are by nature more critical of their professors; and so on. Skeptics should not jump to the conclusion that such interpretations are merely defensive. Rather, the interpretations should be regarded as testable propositions that can be examined by additional study: try out a new item to assess the effectiveness of advising; produce other evidence of the greater critical nature of social science majors.

My hunch is that such intellectual issues would be actively debated and tested only when an atmosphere of openness and constructive self-improvement is encouraged and rewarded. If top administrators must ultimately make hard choices about departmental competition for limited resources, the final decisions should favor and reward openness and receptivity to constructive change.

The final step (E) in the implementation process completes the MIS cycle: The student body is resurveyed to assess change in institutional effectiveness. Repeated measurement of this type not only provides an objective means for determining if remedial actions have been effective, but it also construes a kind of "early warning system" to detect unanticipated changes in institutional impact. It should be emphasized that the cyclical nature of the student-based information system satisfies two important needs: (1) to assess changes in institutional functioning; and (2) to improve a mechanism for improving the student information system by changing, deleting, or adding new items of data.

Figure 2

Sample Output from a Student-Oriented MIS after Three Years: Quarterly Time Diary for Undergraduates



Student Time Studies

Student time, of course, is a key category of process and outcome information. Some institutions may be reluctant to obtain time diaries from students because they assume the estimates will be crude and insensitive to changes in policy. A study of college environments several years ago indicated quite the contrary.[3] Students attending a national sample of 246 undergraduate institutions were asked how hours per week, on the average, they spent in various activities. The variation among institutions was remarkable. These data showed clearly that student bodies can differ widely in the time they devote to activities. Regular monitoring is another means to assess the consequences of administrative decisions.

Figure 2 contains a hypothetical chart showing how student time diary information can be utilized in institutional evaluation and decision-making. Time diary information is shown for three student behaviors: sleeping, studying, and commuting. In this hypothetical example, the institution has been collecting the information on a quarterly basis and has data from the last two academic years and from the first two quarters of the current academic year. Note that the average amount of time spent by the students sleeping has remained fairly stable at about 50 hours per week throughout the survey period. Studying has shown a consistent pattern of declining hours during the spring of the past two years. However, during the first two quarters of the current year, study hours fail to show the increase observed in earlier years. This failure to replicate earlier trends suggests that other factors may have operated to reduce the number of hours that students devote to studying. In other words, the failure to replicate trends from earlier years may be an "early warning sign" of potential problems. Hours spent commuting have been extremely consistent during the first two years but have shown an increase during the current year.

Although the data do not provide a basis for drawing firm conclusions about the reasons for the decline in study hours, the increase in commuting time suggests a possible explanation: students may be studying less because they are commuting more. These concomitant trends thus provide a basis for institutional decision-makers to develop and test alternative hypotheses to account for these trends. For example, it may be that changes in parking regulations introduced in the current year may have increased the amount of commuting time. Or, changes in admissions and requirement policies may have increased the number of commuters. To test the association between commuting and study hours, institutional administrators could cross-tabulate commuting and studying to see if students who commute more study less. There may be other explanations, but the basic point is that the availability of time series data of this sort provides

3. A. W. Astin, *The College Environment* (Washington: American Council on Education, 1968).

the basis for decision-makers to detect changes in critical student behaviors and to formulate and test various explanations for such changes. In this way, changes in institutional policy or program can have a firmer empirical basis.

Possible Benefits

A fully operating student-based management information system would have a number of advantages over more conventional administrative tasks. Assuming that the data were disseminated to key administrators and to faculty at the departmental level, many members of the academic community could become involved in the task of interpreting the data and devising appropriate policies based on those data. One weakness of traditional attempts at institutional evaluation —and I would include here the typical case study prepared for accrediting teams—is that only a limited number of people within the academic community are involved in the development of the data base and the interpretations of results. A comprehensive student-based system, on the other hand, could theoretically involve all members of the academic community in the complex task of interpretation.

A closely related virtue of the student-based approach is that the dialogue concerning institutional policy would be diverted from a preoccupation with budgets and resources to a concern with the educational development of students. Discussions about who should get what piece of the financial pie are inherently competitive and conflict-ridden. There is only so much of the pie to go around and giving more to one group implicitly deprives other groups. Focusing on the educational development of students, however, is a positive process where all interested parties presumably share common objectives. Improving the educational effectiveness of any given unit does not limit or inhibit the ability of any other unit to do the same. This is not to say that a student-based system obviates the need for budgetary debates, but rather that final decisions about budgetary allocations would presumably focus more on their intended educational outcomes.

A student-based system also has the potential to benefit institutions economically, the most obvious area being enrollments. It seems likely that a properly run student-based system could eventually help to reduce attrition rates. Also, there is the possibility that a heavily student-oriented institution might eventually be able to attract more applicants: the information network for prospective college students is such that the word eventually gets around about institutions that have particularly interesting or unique programs.

Accreditation's Role

What role, if any, can the accreditation process play in encouraging institutions to take a more student-oriented approach to planning and decision-making? I believe that accreditation can play a significant role because accrediting teams normally communicate

directly with the top administration of the institution. The administration, of course, determines the type of information system used in decision-making. Perhaps the best device for encouraging administrators to take a more student-oriented approach is the institutional self-study. A well-done self-study can reveal a great deal about the institution's communication and information system. A major complaint heard about self-studies is that they are generally viewed as something an institution does for the benefit of an accrediting team, rather than as a regular part of the institution's information-gathering activity. It is frustrating to encounter an institutional mentality which fails to see the need for an *ongoing* self-analysis as an essential part of the management process.

How can the accrediting organizations begin to encourage institutions to modify their information-gathering and self-assessment activities in the directions I have suggested? One very direct approach is in the types of questions asked of the institution:

- ☐ What kind of information concerning student involvement or lack of involvement is currently available to key institutional personnel?
- ☐ Do classroom instructors and faculty advisors regularly have access to data on students' academic involvement and academic progress?
- ☐ Do student personnel administrators periodically receive information on students' extracurricular participation and social life?
- ☐ Do appropriate data get disseminated in a comprehensible form and in time to take appropriate action?
- ☐ Does the top administration take the initiative in surveying faculty and the staff needs for information on student progress and development?
- ☐ Is the administration responsive to requests for better information?
- ☐ What does the administration know about the quality of instruction, as perceived by students and various departments?
- ☐ What do students think of the advising they receive in various departments?
- ☐ How adequate are different types of student services?

Simply asking such questions is one means of making institutions more aware of the need for this type of information and of its potential value in planning and decision-making.

It also might be possible to develop a new set of criteria or specifications for the institutional self-study. In this regard, I think it would be important for the accrediting teams to encourage institutions to begin to think of the self-study as an ongoing activity rather than as something done every so often for the benefit of an accrediting team.

The student-based system represents a kind of continuing institutional evaluation. Although I agree with those evaluation enthusiasts

who argue that the very process of evaluation can be useful—that it is good for the soul to engage in critical self-evaluation—I am concerned that too many of us have accepted the idea that evaluation is something you do when you have a problem that needs resolution. My impression is that the nature of institutional politics is such that once a problem has been identified and positions have been taken, no amount of objective data collection and self-study is going to budge people from their preconceived positions. Therefore, I am pessimistic about the usefulness of a student-based management system which is designed primarily to provide data to solve institutional conflicts. On the other hand, the student-based system can be extremely useful in *identifying* problems before they have come to the attention of the academic community in general and before political positions have been taken. One might refer to this as a kind of "gratuitous" evaluation in which potential institutional problems are identified through the "early warning system."

Postscript

My view that institutions need to take a more student-oriented approach to administration and planning implies a concept of "quality" that deviates considerably from our traditional definitions. Thus, a "high quality" institution under this new conception is one that knows what's happening to its students. Further, the high quality institution has a student information-gathering and disseminating mechanism which enables it to make appropriate adjustments in programs or policies when the student data indicate that change or improvement is needed. In other words, quality is equated here not with physical facilities or curricula but rather with a continuing process of critical self-examination that focuses on the institution's contribution to the student's intellectual and personal development.

GOALS, OUTCOMES, AND ACADEMIC EVALUATION

Howard R. Bowen

The jargon of higher education is everchanging. Among the new and fashionable words are *evaluation*, *consumer protection*, and *accountability*. The language may be new, but the ideas expressed by these words have long been the basic concepts underlying accreditation. Accreditation, however, may be entering a new era. As higher education has expanded and proliferated, the need and the demand of society for consumer protection and accountability have become more urgent. In meeting new societal needs and demands, the procedures of accreditation must become more concerned with outcomes and less preoccupied with resource inputs. Accrediting bodies will have to provide some of the leadership, the encouragement, and even the clout necessary to persuade institutions to be more mindful of their own outcomes.

Kenneth Boulding, at a conference this past spring at the University of Michigan, said:

> The demand for greater accountability, it seems to me, must be met in two ways. On the one hand, universities must not simply shrug it off as meaningless. They should devote resources to improving the feedback from the processes in which they engage. The university should conceive of itself as an experiment in teaching, learning, and the expansion of knowledge. Its information collection apparatus should be designed with useful feedback in view. This is by no means easy. It should be regarded as a challenge worthy of the best intellectual resources of the institution. The problem should not be pushed off onto administrative officers or even the specialized research institute, though there is much to be said for this. And the more both students and faculty and administrators can see themselves as participating in a continuing process of improvement, the more likely is improvement to take place.
>
> Along with this, however, there must also be a constant campaign of explanation directed toward the public at large and to its representatives as to the necessity for freedom,

leeway, redundancy, space to move, opportunities for experiment, and so on. Without this, the drive for efficiency can be disastrous.[1]

The second part of Dr. Boulding's prescription seems to be of special relevance to voluntary accreditation, the very essense of which is to maintain the freedom of institutions while keeping them socially responsible.

Efficiency, Accountability and Management

In contemporary discussions of academic affairs, three of the most widely discussed concepts are *efficiency*, *accountability*, and *management*. As in the case of the weather, everyone talks about efficiency, accountability, and management but nobody does much about them—at least in a fundamental way. The reason is that all three of these concepts are utterly meaningless in the absence of valid assessments of outcomes, and no one quite knows how to estimate outcomes except through vague intuitive procedures.

Efficiency, by definition, is expressed as a ratio between outcomes and resources employed—that is, between benefits and costs, or less elegantly, between outputs and inputs. Similarly, accountability implies an obligation to produce outcomes that are commensurate with the costs and to demonstrate that the outcomes justify the costs. Likewise, management implies that different technologies (or methods or procedures) will produce different results or outcomes, and that it is the task of managers to select those technologies which will produce the best outcomes in relation to the amount of resources employed. In each case, the assessment of outcomes need not be precise and need not be expressed in cardinal numbers, but to make any one of the three concepts meaningful there must be some notion of outcomes expressed in terms of "more or less." All decisions about staff, curricula, teaching methods, facilities, institutional organization, governance, and even finance can be arrived at rationally and deliberately only if there is some knowledge of effects on outcomes.

It is a fact that cherished values are not readily suseptible to precise measurement. Friendship, love, beauty, honor, patriotism, and fairness are assessed by means of an art that is based upon intuitive judgment. When such intuitive judgment is formalized and institutionalized, it is called criticism. Our powers of criticism are developed in proportion to our sensitivity, and critical judgments usually are based upon standards derived from tradition. They flow out of human experience. The influential critic is a person who has keen sensitivity coupled with knowledge of traditional standards and who is thus able to reach judgments that gain wide acceptance, i.e., the art critic, the social critic, and the educational critic. Even in the area of economics, where money serves as a measure of value, the critic has an important

1. Kenneth E. Boulding, Address, University of Michigan, Ann Arbor, April 13, 1978 (mimeo).

role. For example, an economy that maximizes monetary values may be criticized because it does not produce a fair distribution of income, or because it does not give sufficient attention to the environment, or because it ignores job satisfaction, or because it produces personal alienation, or because it encourages vulgar taste.

In the world as it is—even in the economy—there is no way to solve questions of value by easy quantitative formulas. There is no way to side-step intuitive judgment and criticism, with all the pitfalls they entail. This is especially so in education, where the purpose is to facilitate the sound development of unique human beings and the ultimate end is the good life. It would be foolish to suppose that educational outcomes could be readily quantified and the processes of judgment and criticism could be wholly dispensed with. In educational planning and decision-making, we are forced to practice the art of criticism based on intuitive judgments. As Cardinal Newman observed:

> A university is...an Alma Mater, knowing her children one by one, not a foundry, or a mint, or a treadmill.[2]

Similarly, John Dewey wrote:

> What the best and wisest parent wants for a child, that must the community want for all its children. Any other ideal for our schools is narrow and unlovely; acted upon it destroys our democracy.[3]

And an economist friend of mine, Sar Levitan, summed it all up when he said, "Statistics are no substitute for judgment."[4]

Yet the concept of efficiency has a place in all human endeavors, even in such inscruitable areas as foreign policy, military strategy, religion, art, marriage, poker. Education is surely no exception; there are better ways and poorer ways of going about teaching-learning, and there are also more expensive and less expensive ways of going about it. The most efficient ways are those which yield the highest ratio of results to cost. Just as families or churches or nations can be more or less efficient in achieving their benevolent purposes, colleges and universities can also be more or less efficient. *And colleges and universities could be more efficient if they paid greater attention to discovering their outcomes.*

The Link Between Outcomes and Management

At present, institutions know very little about their results and next to nothing about the effects of changes in their procedures and

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2. John H. (Cardinal) Newman, *The Scope and Nature of University Education*, (New York: E. P. Dutton, 1958), p. 122.

3. John Dewey, *On Education*, (R. D. Archambault, editor), (Chicago: University of Chicago Press, 1974), p. 295.

4. From a poster displayed in Dr. Levitan's office.

methods on the results. Even much of what passes for evaluation has little contact with true outcomes—that is, with what happens to students, whose development is the object of the whole higher educational enterprise. There have been sporadic one-time studies of outcomes in particular institutions and also a number of one-time studies of small samples of institutions, but there have been few systematic ongoing efforts to assess outcomes, and certainly few cases where the study of outcomes has been linked with management. Such studies are urgently needed if institutions are to have better information for management and accountability, and if the profession is to learn more about the consequences of alternative procedures and methods. Without such knowledge, institutions are destined merely to follow *tradition*, or to do what *is expedient* in the light of prevailing pressures of the market and of politics, or to be *vulnerable to every fad* that sweeps through the educational community, or to manage by *intuition*, or to do some of all four.

One may respect tradition because it is the result of a kind of natural selection achieved through many trials and errors; one may understand the need for adjusting to political and market pressures; one may believe that institutions should be open to the new; and one may respect intuition especially when it is practiced by experienced and sensitive persons. Yet, decision-making need not be based solely on tradition, political pressure, fad, and intuition when these can be supplemented by knowledge. If the nature of our task is such that we often must fly blind, it would be good to have radar to give at least a general sense of direction. We all have seen the faculty meeting in which learned men and women debate educational or curricular policy as embodied in degree requirements. They make extended speeches on the advantages of this or that requirement without the remotest notion of what difference their proposals would make in the development of the students for whom they are prescribing.

Seven Basic Principles

I suggest the following basic principles that should be followed in the identification and evaluation of the outcomes of particular colleges or universities, such principles confined to the outcomes of undergraduate education, but equally applicable, I believe, to advanced professional and graduate study, research and scholarship, and public service.

1. The study of outcomes should avoid the common confusion of inputs and outputs. Most evaluation of institutions is conducted in terms of such variables as faculty-student ratios, number of PhDs on the faculty, size of endowment, current expenditures per student, SAT scores, number of library books, range of facilities and equipment, value of physical plant, extracurricular programs, etc. These factors are all inputs and it is by no means established that there is any systematic and positive correlation between these inputs and the

true outcomes defined in terms of the personal development of students.

In view of the wide differences in expenditures per student among seemingly comparable institutions, the burden of proof is upon the high-cost institutions to demonstrate that their generous expenditures actually yield commensurate outcomes. It is not even appropriate to define outcomes in terms of the experience of students in connection with their college education. Such measures as attendance in the libraries and laboratories, number and type of courses taken, attendance at public events, etc., are technologies, not results. Even such variables as absenteeism or dropout rates are not conclusive indicators of outcomes. It is possible that students are doing the right thing, in terms of their personal development, by staying away from formal programs, or by changing institutions, or by dropping out of college altogether. The only valid tests of outcomes are: *What happens in the development of persons? How do persons change and grow as a result of their college experiences?*

II. A second principle is that assessment should be linked to all the major goals of education, and not be confined just to aspects of human development that can be easily measured or that are related to economic success. In general, five kinds of goals will be of interest to most institutions. They are:

- ☐ Cognitive development of students, including verbal and quantitative skills, substantive, knowledge, rationality, critical thinking, intellectual tolerance, lifelong learning.
- ☐ Aesthetic sensibility.
- ☐ Emotional and moral development, including personal self-discovery, human understanding, religious interest, psychological well-being.
- ☐ Practical competence relating to citizenship, economic productivity, family life, consumption, leisure, and health.
- ☐ Direct satisfactions and enjoyment from college education during the college years and in later life.

The goals of an institution are its intended outcomes, and hence institutions are prone to think of their outcomes in terms of their intentions and hopes. But they should be on the lookout also for unintended outcomes. Some of these may by serendipity be positive, but some may be negative. For example, college may generate discouragement, boredom, suppression of creativeness, acquisition of bad habits, needless failure, and even suicide. And these negative outcomes should be taken into account.

III. A third principle is that educational outcomes should relate to the development of whole persons. Most evaluation of students employs instruments that measure only particular aspects of their personalities. Such instruments may measure verbal skills, religious interest,

aesthetic sensibility, general knowledge, or life goals. Each measurement says something about groups of students with respect to a particular dimension of their personalities, but tells very little about what happens to individual students considered as whole persons. The average changes on these various personality dimensions usually are small and lead the unwary to conclude that college really does not matter very much. Contrarily, college may exert a major impact on students, considered as whole human beings, even when there is little or no change in average scores on particular characteristics.

The explanation of this seeming paradox is that there can be enormous dispersion among individuals with respect to particular characteristics while the averages change little or not at all. Every tabulation of scores on specialized test instruments shows wide differences in what happens to individuals as they are affected by college. On any given dimension some students will gain ground, some will lose ground, and some will not change at all. Aggregates and averages reflect the central tendency of all these wide variations and conceal the substantial differences experienced by different individuals. For example, Feldman and Newcomb (1973, p. 9) cite a study in which a group of freshmen achieved an average score on religious value of 41.75 and the identical students as seniors scored 41.57. But the individual students in the group showed changes of -19, -16, -14, -12, -2, +1, +3, +7, +11, +12, +16. A comparison of the two averages would lead to the conclusion that no change had occurred; yet the individual scores revealed enormous variance.

The purpose of higher education is not necessarily to produce positive changes for all its students along every dimension of personality development. This would clearly be impossible and undesirable. Colleges accept individual differences among their students and encourage their students to develop individually along lines consistent with their unique interests and talents. For any individual, such development inevitably means substantial progress along some lines, no change along others, and regression along still others. Regression along some lines is not necessarily a sign of failure. For example, a student who in high school had devoted much time to music may later discover interests in science. As a result, the student may regress during college on aestheticism and progress on intellectuality. A student may come to college with highly developed mathematical skills, but there discover new interests in social issues that result in a regression in mathematical skills but a progression in political awareness. These regressions are not necessarily negative outcomes; they may represent constructive changes in personality configuration as a result of exposure to new opportunities.

It is unlikely that any student will progress simultaneously along all possible lines of development. People differ in the distribution of their talents; some individuals have highly specialized talents and interests, other more diversified ones. Few if any are so well-rounded that they can be expected to make equal progress across all possible

lines of personality development. The cultivation of any one interest takes time and energy. To pursue every interest equally would be at the sacrifice of significant achievement in any one area. *The totally well-rounded individual who pursued every conceivable interest would surely be a bland, innocuous, and mediocre person.* Excellence of personality involves choices based on a weighing of values in relation to interests and talents, not the equal pursuit of every conceived value. There may be some values, such as honor or consideration for others, that should have high priority for all; but among the wide range of values that life presents, there are tradeoffs involving choices based on the unique characteristics of each individual. This being so, each individual does and should make use of the opportunities available in the college environment for the development of his or her unique personality. In the process most individuals may change substantially, but the averages for each personality characteristic may change relatively little.

To study the true outcomes of higher education in all their variability, then, calls for the study of individual students in some depth. One must ask, not what was the average gain in verbal skills of a college's entire student body, but rather what happened in the total personality and in the life experience of individual students as a result of their college careers when these students are seen as whole human beings. The few studies that focus on whole persons yield results that come closer to the changes that educators observe in their students during and after college, than typical studies based on average changes in particular dimensions of personality.

IV. A fourth principle is that outcomes assessment should be based upon the study of alumni as well as of students. Such study raises questions that educational research has barely touched. There is almost no knowledge of carryover to adult life of substantive learning. The residue of a college education—after the initial forgetting of detail—is a virtual mystery. Moreover, we should be interested in the values and attitudes of alumni, their interests, their citizenship, their family life, and their careers as these may have been affected by their college experiences.

V. A fifth principle is that the outcomes assessment should be concerned with change in students as a result of their college experiences, not merely with their absolute level of performance during and after college. By far the most important factor determining the performance of students during and after college is their background and ability at the time of admission to college. If an institution admits mainly bright young people from affluent families, the performance of its students in their studies and in their later careers will almost certainly be superior to those of students of an institution that admits many students of limited backgrounds and abilities. For the more selective colleges and universities to take credit for the achievements

of their alumni, as they often do, borders at best on the naive and at worst on the fraudulent. There is evidence to indicate that many non-selective institutions bring about greater changes in their students than some selective ones, and it is *change* not absolute performance that is the criterion of true educational outcomes. The change may be measured relative to change achieved by those who do not attend college, or relative to change achieved by students of other institutions, or relative change achieved by the subject institution in past years.

VI. A sixth principle is that the evaluation scheme must be practicable, not too time-consuming or expensive. It should concentrate on major goals and avoid trivial detail, and should be based on small samples of students and alumni and not try to cover the entire universe. The experiences associated with evaluation should be designed to have educational benefits to students of sufficient value to justify the cost on direct educational grounds. Faculty and student time involved in outcomes assessment should be incorporated in the regular educational program and not require additional expenditures. The test of practicability means also that the results must be understandable to the public and their representatives, and must carry conviction. Otherwise, outcomes assessment will be worse than useless in achieving accountability. Practicability implies also that the study of outcomes should be linked with serious educational decision-making and should not be used merely for public relations. *In short, practicability calls for simplicity, low cost, and integrity.*

VII. The seventh principle is that outcomes assessment should develop from the bottom up within individual colleges and universities rather than be imposed from the top down by federal or state government or by national accrediting bodies. There is need for a great deal of experimentation in concepts and methods. Assessment should be related to the special missions or philosophies of particular institutions. It should not be restricted to procedures and instruments that can be used nationally. *Institutions should not have to adjust their goals and programs to the requirements of a standardized evaluation scheme or to measure their performance using uniform standards set by others.* Clearly, there is a place for procedures and instruments that have wide applicability, but there is great danger that outcomes evaluation will be dominated by conventional academic testing. This, in my opinion, would be a grave mistake. The true outcomes of education cannot be expressed—except in small part—through techniques that produce neat and tidy numerical scores. They call for serious exploration of what happens in the lives of people as a result of their college experiences. Sound outcomes assessment will focus on students as persons, and will provide a vehicle by which institutions can become acquainted with their students as living persons rather than as numbers in a computer or grades on transcripts.

The Practical Issues of Outcomes Assessment

There are several practical issues to be considered in successful outcomes measurement.

First, there is the technical problem of controlling for extraneous variables. How does one know whether what happens to students in college is due to native ability, family background, the mass media, or to the normal maturation process? This problem can be solved in two ways. One way is to record change over time in the results obtained by the institution. If over time, one observes that gains between the freshmen and senior years are increasing or decreasing, that becomes evidence that the institution is progressing or retrogressing. An evaluation program carried on year after year establishes its own norms and provides a way of measuring, or at least judging, institutional progress. Another is to join with other comparable institutions in the evaluative process, so that each institution could compare its results with others. Ideally, a group of cooperating institutions would be composed of those which are not mutually competitive so that there would be no diffidence about sharing information.

A second problem pertains to publicity of results from outcome studies. Should they be held in confidence or made public? (My preference would be to make the evaluative process public.) The entire college or university community ought to be psychologically involved in evaluation. The evaluation ought to be conceived as a concerted effort by everyone in the institution—students, faculty, administration, and other staff—to bring about educational improvement. In case of poor performance or retrogression or sluggish improvement, the whole community should know and be concerned and all should lend their efforts to correct the problem. Good public relations would flow from an honest and competent effort to evaluate results, whereas a policy of publicizing good news and suppressing bad news would be the worst kind of public relations. Just as most institutions publish their financial and enrollment data, they might publish their educational results as well. The results might at times be humbling and sobering, but those institutions which could manage and plan on the basis of clear objectives and measured performance would outdistance those which fly blind.

Finally is the question of cost. The program outlined in this paper would not be easy or cheap. An institution eventually might devote as much as one to three percent of its educational budget to evaluation and related research and development. Substantial parts of the program could be started soon and without exorbitant cost, but the entire concept would require a great deal of invention, learning, operational time, and money. By using sampling techniques, in the beginning with very small samples, the cost could be held down.

In the startup phase, an institution could secure considerable help from foundations or special gifts, but not in the long pull. I believe the program should be incorporated into the teaching load of the faculty by giving students credit for participation in the program

and thus reducing the ordinary teaching load. Students might earn the equivalent of credit for at least one course if they took the tests, kept the records, attended the interviews, and filled out the questionnaires which would be part of the program. The experience of participation in an effort to achieve solid evaluation would have educational significance justifying credit. By offering credit, faculty time could be diverted from ordinary teaching to the evaluation program.

Institutions that will give leadership in the matter of evaluation will find the costs returned to them many times over, partly because evaluation is the way to demonstrable quality and partly because it is the way to true accountability. Money, for particular institutions and also for higher education as a whole, will follow demonstrated quality and accountability.

A Concluding Note

I do not pretend that outcomes assessment as I conceive it would be easy. I am not even sure it is feasible. Yet I think it is urgent that educators try to learn more about their outcomes. And I believe that through such efforts carried on independently in many institutions, we might gradually through trial and error develop sound methods which would supplement our intuitive judgments and serve as a corrective for the wishful thinking and the empty rhetoric in which we all indulge. Over time, the assessment process might contribute to efficiency and might demonstrate the value of higher education in ways that would strengthen public confidence in it.

WHAT HAVE WE LEARNED?

A Summary of the 1978 COPA Summer Conference

Charles M. Chambers

Considering the substantive and informative papers of Alexander W. Astin and Howard R. Bowen, it is hard to imagine a conference being bold enough to try to accomplish more. Yet scheduled between these two presentations were a number of sessions, panels, and workshops which delved further into the conference theme of "Evaluating Educational Quality." Many of these sessions emphasized the application of new evaluative concepts to accreditation and, in a number of instances, reinforced many of the same points made by Dr. Astin and Dr. Bowen. This synthesis will not recount individual session topics of particular speeches. It will go beyond merely reporting the common ideas and themes which flowed through the conference, and will attempt to state what was learned at the conference and how this knowledge might be applied to the work of accrediting agencies.

Overall, the conference affirmed that the measurement of outcomes not only is desirable but is essential if postsecondary education is to gain a better understanding of quality factors in institutions and programs. Indeed, outcome approaches go far beyond accreditation's focus on the evaluation of educational quality and are viewed by many as central to the planning, design, and operation of sound educational activities. Thus, by measuring outcomes, accreditation would become an integrated part of the entire educational process rather than an ad hoc diagnostic tool brought in from outside the institution.

The symmetry which outcomes assessment offers both to the establishment and to the evaluation of educational activities would greatly enhance the efficiency, consistency, and reliability of accreditation. As a bonus, if it were based on outcomes, accreditation would directly reflect the accomplishments of the educational process and would be heavily relied on in reporting and accounting to various constituencies and users.

The Outcomes Assumption

A working assumption in assessing outcomes is that the educational process can be structured along lines which make prominent the goals to be achieved. Before accreditation attempts to make use of such an approach to evaluation, we would want to be sure that the

assumption on which it is based is solid. The study directed by Norman Burns[1] presented a test and verification of this hypothesis and demonstrated that institutions should have no qualms about developing and applying new policies and procedures. In particular, the study demonstrated the value to institutions of establishing clear objectives for their educational services. These objectives should be stated in explicit terms which are amenable to external evaluation. Also, in conjunction with the educational objectives, the institution should establish an ongoing system of self-assessment which can analyze, describe, and document when and how the objectives are being achieved. Finally, the whole process of establishing objectives and assessing achievement should be organized so that an effective validation by peer experts can be accomplished by the accrediting agencies.

Despite the desirability of moving in this direction, it remains a fact that evaluation and validation are amorphous processes which compound and confound dimensions of quality in education. Thus, accreditation must try to learn from others who are designing and creating academic programs using outcomes methods. Much progress has been made by a number of independent researchers. Collectively, they have produced an assortment of resource materials including directories, taxonomies, and case studies. These all point to significant uses of outcome approaches by educators. It is an opportune time for accreditation to formulate and adopt appropriate new evaluation processes. The situation faced today by accreditation is somewhat akin to the early days of instructional technology. Both the mechanical equipment and the subject matter experts were available, but the learning theory specialists still were needed to adapt the program material to the technical format. Accreditation faces a similar problem of having to take much that was presented at the conference and build it into working procedures.

The Quantitative Frame of Reference

One important observation made during the conference was that whenever a development in accreditation is proposed, there is always a certain amount of enthusiasm from some quarters that accreditation must become fairer, more rigorous, and more accountable. It is suggested that there be more objective approaches to collecting statistical data which, when weighted with the proper coefficients, will yield a numerical measure of accreditable quality. Such a quantitative approach, however, is devoid of the flexible assessment of quality which accreditation now offers. At best, accreditation must remain a mix of both the quantitative and qualitative aspects of education.

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1. Norman Burns, Director, *Evaluation of Institutions of Postsecondary Accreditation: Assessment in Terms of Outcomes Through Institutional Self-Study.* (Washington: Council on Postsecondary Accreditation, 1978).

Of course, there is a role for analytic studies. Quantitative factors can help set the frames of reference in which the subjective expertise of the peer educator is brought to bear. This in no sense computerizes accreditation, and we still must arrive at that end point of classical, rhetorical criticism where people who know their stuff say "having considered all this, that, or the other, I like it or I don't like it because...".

A good illustration of the importance of well defined frames of reference to accreditation is given by the surveys occasionally made of various schools and departments and which purport to rank them by reputation. Here, peers are asked to examine a list of schools or programs and "using their expertise" rank them from the best on down. A simple tally of the votes is then used to see which is "number one." Such surveys are not given much deference, because the peers' expertise is squandered by lack of a proper evaluative framework based on current knowledge (a self-study), concurrent examination (a team visit), and coordinated decision-making (a commission review).

Evaluation via Outcomes

While there are a variety of types of outcome measures, those which can reasonably be used for evaluating educational quality should meet the following two tests.

First, each outcome should represent something which is teachable; that is, it is generally accepted that the particular educational objective adopted can be achieved through an instructional or didactic process. This is not to say that there are not other appropriate objectives—for example in research, student services, finance, and community relations—which an institution should set for itself. Rather, the latter outcomes must be viewed as leading to the educational objectives which much remain foremost in any assessment of educational quality.

Second, each outcome should measure something judged relevant to the graduate's functioning throughout adult life. This is not to suggest that only things which have a practical use should be taught. Rather, it permits educational worth to be judged on the broad base of the student's entire life rather than on limited terms of what is useful and marketable at the time of graduation. The scope of this test obviously is quite extensive. Both the specific types of technical competencies derived from professional programs as well as the quality of life and responsible citizenship potential of the liberal arts programs can be represented in appropriate outcome terms. In keeping with the role of accreditation not to overly intrude into the internal academic affairs of the institution or program, this test merely serves to screen out the seductive sophistry and rambling relevance of the innovative and attempts to make explicit that which is not only worthwhile, but also worthy of evaluation.

One example of outcomes which meet these tests is given by the

suggestions of the COPA Task Force on Educational Quality. At the baccalaureate level the institution is expected to provide communication skills, problem-solving skills, decision-making skills, and value-clarifying skills. These outcomes are the essence of an adult functioning in a complex society and can be applied to programs in the arts and humanities, science and technology, and the social studies.

On a broader, institutional plane a second example is found in the characteristics of excellence in higher education which form the basis for accreditation by the Commission on Higher Education of the Middle States Association of Colleges and Schools. Among other things, these characteristics speak of programs or courses which develop abilities to form independent judgment, to weigh values, and to understand fundamental theories. Further, where appropriate, offerings are attuned to professional or occupational requirements. The characteristics also encourage clearly stated purposes and objectives coupled with a persistent concern as to the relation between objectives and outcomes. Finally, each institution is expected to create an atmosphere conducive to developing the students' education beyond the minimum degree requirements.

More generally, outcomes can be identified at various levels within the institution. For example, an institution-wide outcome would be to maintain its reputation for academic quality by continuing to earn one or more types of accreditation. Outcomes at the program level could be providing a general education, offering preparation for entry into an occupation, or developing the qualifications necessary for acceptance into graduate school. At the course level, the primary outcome is to teach the subject matter defined by the syllabus. Related outcomes might be to prepare the student for a more advanced course, or to enable the student to integrate separate fundamental courses studied earlier.

Self-Study and Team Review

In order for outcomes approaches to succeed, it was felt by conferees that such approaches must have the support and involvement of the faculty actually offering the programs to be evaluated. This is an ideal match to the philosophy of the accreditation self-study. It was observed that as a tool for formulating and focusing faculty judgment the self-study remains the central genius of accreditation.

Current research findings were presented at the conference comparing studies made of outside, monitored internal, and strictly internal evaluation reports. These findings show that internal evaluation is as reliable and accurate a method of depicting the current situation as the other two. This does much to dispel the criticism that the self-study—on its face—is self serving, biased and unreliable.

Although the self-study remains an integral part of the process, a number of suggestions were made about the types of questions the self-study should try to answer. These questions may be generally

characterized as open-ended, with a strong emphasis on student involvement in the educational process. Typical ones include:

- ☐ What data does the administration provide on student activities which is of use to and is used by the faculty?
- ☐ What are the students' attitudes about the advising system?
- ☐ Do advisors and other faculty have access to information on student participation in extra-curricular activities?

Thus, a starting point in making this a part of accreditation is to review the self-study handbooks to see where changes can be made which encourage an institution to look at itself from a student involvement, outcomes-oriented perspective.

The emphasis on student activities stems from research that strongly suggests a cause and effect link between student involvement and subsequent learning that occurs. It was not made clear, however, whether self-selection or native ability is involved, i.e., "good students achieve good performance;" but, regardless, from accreditation's point of view, the relationship between student involvements and quality outcomes are clear enough to warrant increased self-study in student activity areas.

Because of the open-ended nature of this approach, an important caveat is in order. In assessing outcomes, accreditation must exercise much care in distinguishing between "public data" and "private data." On the one hand, public data is prepared by the institution for general dissemination and reporting. It is usually too summarized and too targeted to an external audience to be useful in evaluation. On the other hand, private data is that which can be used for evaluation and can be managed within the confidentiality of the accreditation process. For example, a student assessment of individual faculty members to be published in a campus-wide directory would be less useful to accreditation than similar evaluations of faculty in which students were asked to respond department-by-department to much sharper questions about educational quality.

Once the self-study is completed to the satisfaction of the accrediting body, it should continue to be validated by a visiting team of peer experts. Because the self-study will have changed in format and content, the members of the team must be specially trained to apply their educational expertise in a framework built around outcome measures. This involves more than just orienting the team to how the institution applied outcome approaches in its self-study. Team members must receive specific formal training in the methodology of outcomes evaluation so that their report can mesh with the self-study.

The Use of Accreditation

In a different vein, the conference explored the dimensions of self-regulation and the extent to which an institution should periodically examine itself, with or without accreditation. While this is

not directly related to outcomes assessment, there was consensus that the accreditation process should not be viewed as the end of a study of past events, but rather the beginning of plans for future activities designed to bring about changes indicated by the accreditation review. Furthermore, if accrediting agencies are to give increased attention to outcome approaches, then accreditation can help insure that the institutions get the benefit of what is an expensive and time-consuming exercise. Put bluntly, accreditation should strive vigorously to overcome the "thank goodness it's over for another eight years" syndrome found on so many campuses.

Schematically, a strategy designed to encourage an institution to use its own self-study for future planning might proceed along these five steps:

☐ After the institution has sought accreditation and completed the self-study phase, the campus committee develops a concluding chapter in which it identifies the problems that exist and presents an action plan for solving them. As a minimum, the plan would be certain to fulfill the accrediting agencies' criteria, but ideally it would bring about even greater improvements on the campus.

☐ After reviewing the self-study and its final chapter, the accrediting agency would be asked to suggest resource persons who would complement the individual educational objectives of the institution and have expertise in the types of solutions proposed for its problem areas. These persons could later possibly serve as the visiting team or committee.

☐ At this point, the resource persons receive and review the self-study and offer advice to both parties about proceeding with the plan. Their report is not a formal accreditation finding and if the plan presented in the last chapter of the self-study is found wanting, it is returned to the institution with suggestions for further amplification and refinement.

☐ After nine to twelve months of using the plan, the institution is assigned a formal team which then visits the school and writes a report judging how well the school is solving those problems which could prevent it from achieving its stated objectives.

☐ The team report and the self-study are then examined by the Commission in reaching a final accreditation decision.

Such a process would result in the following somewhat futuristic definition of accreditation:

> An institution or program is accredited if it: (1) can demonstrate that it can accurately assess its own potential relative to the evaluative criteria of the accrediting agency; (2) that it can use this information to design and implement a plan to achieve its potential; and (3) that the accrediting agency can validate this plan and its success through peer review.

It was proposed that one to three percent of an institution's budget be officially allocated to assessment, evaluation, and planning.

Validity

One remaining theme from the conference involved the nagging doubt about the validity of outcomes assessments. Unfortunately, the concept of formal, statistical validity of subjective evaluative methods such as accreditation remains as elusive as ever. Until more studies and analyses have been completed we must rely on the good offices of the expert critic working voluntarily through the checks and balances of the accrediting process to evaluate educational quality.

Finally, a bonus of the conference which reinforced the importance of outcomes assessments was the report on the COPA project on the evaluation of nontraditional education.[2] Because nontraditional education by definition does not fit traditional patterns, we learned that it must be looked at directly in terms of its educational accomplishment. The researchers in this project concluded that nontraditional education is most naturally evaluated *and accredited* in terms of outcomes, an important lesson, if not a new theme.

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2. Grover J. Andrews, *Assessing Nontraditional Education*, four vols., (Washington: Council on Postsecondary Accreditation, 1978).

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